

## **REMARKS**

Applicant requests favorable reconsideration and allowance of this application in view of the foregoing amendments and the following remarks.

Claims 1-11 are pending in this application, with Claims 1, 10, and 11 being independent. Claims 1-8, 10, and 11 have been amended to improve their form, independent Claims 1, 10, and 11 have been amended to overcome a substantive rejection, and Claim 11 has been amended to overcome formal rejections thereto. Applicant submits that support for the amendments can be found in the original disclosure, and therefore no new matter has been added.

The disclosure is objected to for minor informalities at pages 2, 12, and 13 of the specification. In response, Applicant has amended these portions of the specification to address the points raised by the Examiner, thereby obviating the objections.

Claim 11 is rejected under 35.U.S.C. §101 and under 35.U.S.C. §112, second paragraph. In response, while not conceding the propriety of the rejections, Claim 11 has been amended to address the points raised by the Examiner. Applicant submits that as amended, Claim 11 now even more clearly satisfies 35.U.S.C. §101 and under 35.U.S.C. §112, second paragraph.

Claims 1-4, 6, 7, 10, and 11 stand rejected under 35.U.S.C. §102(e) as being anticipated by U.S. Patent No. 6,351,561 (Iyengar). Claim 9 stands rejected under 35.U.S.C. §103(a) as being unpatentable over U.S. Patent No. 6,351,561 (Iyengar). Claims 5 and 8 stand rejected under 35.U.S.C. §103(a) as being unpatentable over the combination of U.S. Patent No. 6,351,561 (Iyengar) and U.S. Patent No. 6,058,205 (Bahl et al.).

In response, while not conceding the propriety of the rejections, independent Claims 1, 10, and 11 have been amended. Applicant submits that as amended, these claims are allowable for the following reasons.

Independent Claim 1 relates to an information processing method of dividing a feature space in which a point set given as learning patterns is present to form a classification tree on the basis of the learning patterns. Claim 1 recites a linear combination feature amount generation step, a hierarchization pre-processing step, and a classification tree generation step.

Claim 1 has been amended to recite that the linear combination feature amount generation step generates a plurality of new feature amounts by a linear combination of feature amounts of the learning patterns. Claim 1 has also been amended to recite that the hierarchization pre-processing step forms a plurality of hierarchical structures of the learning patterns by hierarchizing each of the plurality of the new feature amounts generated in the linear combination feature amount generation step. Further, Claim 1 has been amended to recite that the classification tree generation step generates a classification tree on the basis of the plurality of hierarchical structures formed in the hierarchization pre-processing step.

In contrast, the patent to Iyengar is not understood to disclose or suggest a hierarchization pre-processing step that forms a plurality of hierarchical structures of learning patterns by hierarchizing each of a plurality of the new feature amounts generated in a linear combination feature amount generation step, as recited by amended Claim 1. Therefore, this patent is also not understood to disclose or suggest a classification tree generation step that generates a classification tree on the basis of the plurality of

hierarchical structures formed in the hierarchization pre-processing step, as also recited by Claim 1.

The Office Action states that this patent shows the hierarchization pre-processing step and the classification tree generation step at column 3, lines 6-20. This portion of the Iyengar patent states:

In an example embodiment of the invention, the iterative method starts out with the numeric attribute axes as a starting set of vectors and uses the hyperplanes orthogonal to these vectors in the decision tree generating process. Any decision tree generating process may be used or adapted for this task. The resultant tree is used to generate a new set of vectors. Computation of the new set of vectors is performed using the leaf nodes in the tree generated in the latest iteration. Pairs of leaf nodes are considered and analyzed to determine one or more new vectors. The resulting vectors are filtered to get a new set that is then used for the next iteration. This iterative process continues until a stopping criteria is reached. When the process stops, one of decision trees generated in one of the iterations is chosen as a final solution from this method.

But Applicant does not understand this portion of the Iyengar patent to disclose or suggest a hierarchization pre-processing step that forms a plurality of hierarchical structures of learning patterns by hierarchizing each of a plurality of the new feature amounts generated in a linear combination feature amount generation step, as recited by amended Claim 1. Therefore, this patent is also not understood to disclose or suggest a classification tree generation step that generates a classification tree on the basis of the plurality of hierarchical structures formed in the hierarchization pre-processing step, as also recited by Claim 1.

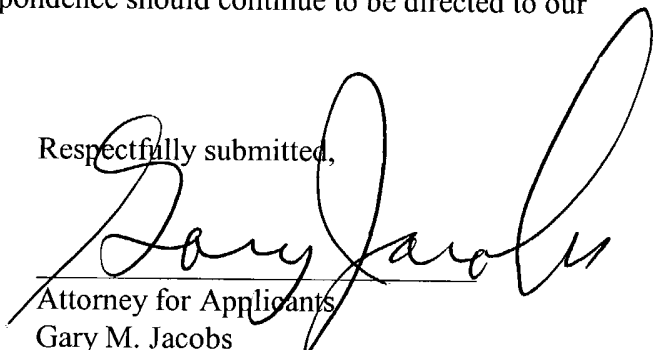
For this reason, amended Claim 1 is understood to be allowable over this patent. And because amended independent Claims 10 and 11 are corresponding apparatus and program code claims, these claims are allowable for similar reasons.

The dependent claims are allowable for the reasons given for the independent claims and because they recite features that are patentable in their own right. Individual consideration of the dependent claims is respectfully solicited.

In view of the above amendments and remarks, the application is now in allowable form. Therefore, early passage to issue is respectfully solicited.

Applicants' undersigned attorney may be reached in our Washington, D.C. office by telephone at (202) 530-1010. All correspondence should continue to be directed to our below-listed address.

Respectfully submitted,



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